

Table 7. Energy Consumption Estimates by Source, Selected Years, 1960-2000, Hawaii

Year	Coal ^a	Natural Gas ^b	Petroleum											Nuclear Electric Power	Hydro-electric Power ^e	Wood and Waste ^a	Net Interstate Flow of Electricity/Losses ^g	Total ^h
			Asphalt & Road Oil ^a	Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels											Million kWh	Other ^{a,f}	Million kWh		
1960	0	0	29	2,640	886	4,321	91	112	38	3,429	4,766	533	16,844	0	27	—	—	0
1965	0	0	306	613	1,612	7,618	49	219	94	4,082	7,230	655	22,478	0	105	—	—	0
1970	0	0	377	133	1,695	14,273	153	938	71	5,691	10,154	619	34,105	0	108	—	—	0
1975	0	0	379	116	1,948	14,849	76	872	104	6,766	11,255	734	37,097	0	89	—	—	0
1980	0	3	285	199	5,987	14,116	9	1,573	94	7,231	13,196	872	43,562	0	86	—	—	0
1985	46	2	308	155	4,611	13,260	2	133	86	7,594	13,185	757	40,091	0	86	—	—	0
1990	R 29	3	381	272	6,822	12,646	(s)	178	96	8,670	17,433	2,215	48,714	0	R i 80	—	—	0
1991	R 45	3	383	261	7,239	11,123	(s)	214	86	8,970	15,418	1,910	45,606	0	71	—	—	0
1992	R 303	3	431	243	5,588	9,993	(s)	651	88	8,870	16,271	2,304	44,439	0	61	—	—	0
1993	R 691	3	444	198	4,837	8,891	1	884	90	9,060	12,361	2,050	38,814	0	56	—	—	0
1994	R 704	3	407	210	5,063	9,472	1	1,619	94	9,343	12,931	2,256	41,396	0	R 139	—	—	0
1995	R 895	3	438	218	5,017	9,940	1	1,316	92	9,416	12,348	2,161	40,947	0	98	—	—	0
1996	R 930	3	401	165	4,418	10,087	1	1,319	89	9,374	10,379	2,577	38,811	0	R 104	—	—	0
1997	R 912	3	396	121	4,287	10,217	1	241	94	9,358	9,879	2,540	37,134	0	115	—	—	0
1998	R 843	3	322	107	4,343	9,990	(s)	844	99	9,342	11,026	2,085	38,159	0	121	—	—	0
1999	R 801	3	353	58	4,507	9,474	(s)	376	100	8,953	11,120	2,091	37,031	0	R 115	—	—	0
2000	816	3	604	45	4,539	9,438	(s)	562	98	9,289	11,976	1,950	38,501	0	103	—	—	0
Trillion Btu																		
1960	0.0	0.0	0.2	13.3	5.2	23.5	0.5	0.4	0.2	18.0	30.0	3.2	94.6	0.0	0.3	0.0	0.0	94.9
1965	0.0	0.0	2.0	3.1	9.4	42.3	0.3	0.9	0.6	21.4	45.5	3.9	129.3	0.0	1.1	0.2	0.0	130.6
1970	0.0	0.0	2.5	0.7	9.9	80.1	0.9	3.5	0.4	29.9	63.8	3.7	195.4	0.0	1.1	0.4	0.0	197.0
1975	0.0	0.0	2.5	0.6	11.3	83.5	0.4	3.2	0.6	35.5	70.8	4.4	212.9	0.0	0.9	0.6	0.0	214.4
1980	0.0	3.0	1.9	1.0	34.9	79.2	0.1	5.8	0.6	38.0	83.0	5.2	249.6	0.0	0.9	11.9	0.0	265.4
1985	1.1	2.7	2.0	0.8	26.9	74.4	(s)	0.5	0.5	39.9	82.9	4.7	232.6	0.0	0.9	14.2	0.4	251.9
1990	0.7	3.0	2.5	1.4	39.7	71.1	(s)	0.6	0.6	45.5	109.6	13.3	284.4	0.0	R i 0.8	R 22.2	R i 1.1	0.0
1991	R 1.1	2.9	2.5	1.3	42.2	62.6	(s)	0.8	0.5	47.1	96.9	11.6	265.6	0.0	R 21.7	1.4	0.0	R 293.3
1992	R 6.8	2.9	2.9	1.2	32.6	56.5	(s)	2.4	0.5	46.6	102.3	13.8	258.8	0.0	R 21.3	1.3	0.0	R 291.6
1993	R 15.6	2.8	2.9	1.0	28.2	50.4	(s)	3.2	0.5	47.6	77.7	12.4	224.0	0.0	R 20.9	R 4.5	0.0	R 268.4
1994	R 15.7	2.9	2.7	1.1	29.5	53.7	(s)	5.9	0.6	48.9	81.3	13.6	237.2	0.0	R 1.4	R 18.0	R 5.2	0.0
1995	R 19.9	2.9	2.9	1.1	29.2	56.4	(s)	4.8	0.6	49.1	77.6	13.1	234.7	0.0	R 17.2	6.3	0.0	R 282.0
1996	R 20.4	2.8	2.7	0.8	25.7	57.2	(s)	4.8	0.5	48.9	65.3	15.5	221.4	0.0	1.1	16.0	R 6.6	0.0
1997	R 20.0	2.7	2.6	0.6	25.0	57.9	(s)	0.9	0.6	48.8	62.1	15.3	213.7	0.0	1.2	R 15.4	R 6.6	0.0
1998	R 18.7	2.8	2.1	0.5	25.3	56.6	(s)	3.1	0.6	48.7	69.3	12.6	218.9	0.0	R 1.2	R 14.3	6.5	0.0
1999	R 17.7	2.9	2.3	0.3	26.3	53.7	(s)	1.4	0.6	46.7	69.9	12.6	213.7	0.0	1.2	R 14.7	6.0	0.0
2000	17.7	3.0	4.0	0.2	26.4	53.5	(s)	2.0	0.6	48.4	75.3	11.8	222.3	0.0	1.1	13.8	7.1	0.0

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products consumed in the industrial sector. See a full description in the Technical Notes, Section 4, "Other Petroleum Products."

^e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of imports of electricity that is derived from hydroelectric power.

^f "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Section 5 of the Technical Notes for an explanation of estimation methodology.

^g Net interstate flow of electricity is the difference between the amount of energy in the electricity sold within a State (including associated losses) and the energy input at the electric utilities within the State. A positive number indicates

that more electricity (including associated losses) came into the State than went out of the State during the year; conversely, a negative number indicates that more electricity (including associated losses) went out of the State than came into the State.

^h From 1989, "Total" does not equal the sum of the columns. Net imports of electricity generated from nonrenewable energy sources (shown in the Technical Notes Table TN8) is included in the total but not in any other columns.

ⁱ There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

kWh=Kilowatthours. R=Revised data. —=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 8. Residential Energy Consumption Estimates, Selected Years, 1960-2000, Hawaii

Year	Coal ^a	Natural Gas ^b	Petroleum				Wood ^a	Geothermal	Solar ^d	Electricity ^a	Electrical System Energy Losses ^e	Total	
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Thousand Cords	Geothermal	Solar ^d	Million Kilowatthours	Net Energy	Million Kilowatthours	
1960	0	0	(s)	0	57	58	0	—	—	514	—	1,550	—
1965	0	0	1	0	113	114	0	—	—	861	—	1,976	—
1970	0	0	1	0	447	449	0	—	—	1,285	—	3,021	—
1975	0	0	1	0	320	321	0	—	—	1,663	—	3,732	—
1980	0	1	1	0	430	431	0	—	—	1,841	—	4,103	—
1985	0	1	(s)	0	101	101	0	—	—	1,879	—	3,928	—
1990	0	1	(s)	0	127	128	0	—	—	2,324	—	4,734	—
1991	0	1	(s)	(s)	131	131	0	—	—	2,396	—	4,132	—
1992	0	1	(s)	(s)	413	413	0	—	—	2,438	—	3,711	—
1993	0	1	1	(s)	88	89	0	—	—	2,469	—	3,061	—
1994	0	1	1	(s)	90	91	0	—	—	2,557	—	2,859	—
1995	0	1	1	(s)	86	88	0	—	—	2,606	—	2,923	—
1996	0	1	(s)	(s)	107	107	0	—	—	2,676	—	3,023	—
1997	0	1	(s)	(s)	198	198	0	—	—	2,668	—	2,927	—
1998	0	1	(s)	(s)	563	563	0	—	—	2,641	—	R 2,987	—
1999	0	1	(s)	(s)	319	319	0	—	—	2,689	—	3,145	—
2000	0	1	(s)	0	436	437	0	—	—	2,765	—	3,159	—
Trillion Btu													
1960	0.0	0.0	(s)	0.0	0.2	0.2	0.0	0.0	0.0	1.8	2.0	5.3	7.3
1965	0.0	0.0	(s)	0.0	0.5	0.5	0.0	0.0	0.0	2.9	3.4	6.7	10.1
1970	0.0	0.0	(s)	0.0	1.7	1.7	0.0	0.0	0.0	4.4	6.1	10.3	16.4
1975	0.0	0.0	(s)	0.0	1.2	1.2	0.0	0.0	0.0	5.7	6.9	12.7	19.6
1980	0.0	1.4	(s)	0.0	1.6	1.6	0.0	0.0	0.0	6.3	9.2	14.0	23.2
1985	0.0	0.7	(s)	0.0	0.4	0.4	0.0	0.0	0.0	6.4	7.5	13.4	20.9
1990	0.0	0.6	(s)	0.0	0.5	0.5	0.0	f 0.0	f 0.9	7.9	f 9.9	16.2	f 26.1
1991	0.0	0.6	(s)	(s)	0.5	0.5	0.0	0.0	1.0	8.2	10.2	14.1	24.3
1992	0.0	0.6	(s)	(s)	1.5	1.5	0.0	0.0	1.0	8.3	11.4	12.7	24.1
1993	0.0	0.6	(s)	(s)	0.3	0.3	0.0	0.0	1.1	8.4	10.4	10.4	20.9
1994	0.0	0.6	(s)	(s)	0.3	0.3	0.0	0.0	1.2	8.7	10.8	9.8	20.6
1995	0.0	0.6	(s)	(s)	0.3	0.3	0.0	0.0	1.2	8.9	11.0	10.0	21.0
1996	0.0	0.6	(s)	(s)	0.4	0.4	0.0	0.0	1.3	9.1	11.3	10.3	21.7
1997	0.0	0.5	(s)	(s)	0.7	0.7	0.0	0.0	1.3	9.1	11.6	10.0	21.6
1998	0.0	0.6	(s)	(s)	2.0	2.0	0.0	0.0	1.3	9.0	12.9	10.2	23.1
1999	0.0	0.6	(s)	(s)	1.2	1.2	0.0	0.0	R 1.4	9.2	12.2	10.7	23.0
2000	0.0	0.6	(s)	0.0	1.6	1.6	0.0	0.0	1.4	9.4	12.9	10.8	23.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Includes small amounts of solar thermal and photovoltaic energy consumed by the commercial sector that cannot be separately identified. See Section 5 of the the Technical Notes for an explanation of estimation methodology.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for

electrical system energy losses.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

—=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 9. Commercial Energy Consumption Estimates, Selected Years, 1960-2000, Hawaii

Year	Coal ^a	Natural Gas ^b	Petroleum						Wood ^a	Electricity ^a	Electrical System Energy Losses ^d	Total ^e		
			Distillate Fuel ^a	Kerosene ^a	LPG ^{a,c}	Motor Gasoline	Residual Fuel ^a	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Thousand Cords	Geothermal	Million Kilowatthours	Net Energy	Million Kilowatthours	
1960	0	0	48	23	10	55	41	177	0	—	306	—	921	—
1965	0	0	71	39	20	59	31	220	0	—	495	—	1,136	—
1970	0	0	174	87	79	133	38	511	0	—	771	—	1,813	—
1975	0	0	84	45	57	98	15	299	0	—	1,109	—	2,489	—
1980	0	2	398	0	76	54	25	552	0	—	1,462	—	3,259	—
1985	0	2	136	1	18	47	21	223	0	—	1,612	—	3,371	—
1990	0	2	507	(s)	22	59	837	1,426	0	—	2,253	—	4,589	—
1991	0	2	613	(s)	23	49	19	703	0	—	2,355	—	4,062	—
1992	0	2	437	(s)	73	45	1,063	1,618	0	—	2,417	—	3,678	—
1993	0	2	279	1	15	11	35	341	0	—	2,419	—	3,000	—
1994	0	2	252	(s)	16	11	439	718	0	—	2,601	—	2,908	—
1995	0	2	253	(s)	15	11	63	343	0	—	2,779	—	3,116	—
1996	0	2	152	(s)	19	11	13	195	0	—	2,819	—	3,185	—
1997	0	2	308	(s)	35	11	11	366	0	—	2,839	—	3,114	—
1998	0	2	194	(s)	99	11	1,812	2,116	0	—	2,833	—	3,205	—
1999	0	2	154	(s)	56	11	7	228	0	—	2,944	—	3,444	—
2000	0	2	145	(s)	77	11	10	243	0	—	3,092	—	3,533	—
Trillion Btu														
1960	0.0	0.0	0.3	0.1	(s)	0.3	0.3	1.0	0.0	0.0	1.0	2.0	3.1	5.2
1965	0.0	0.0	0.4	0.2	0.1	0.3	0.2	1.2	0.0	0.0	1.7	2.9	3.9	6.8
1970	0.0	0.0	1.0	0.5	0.3	0.7	0.2	2.7	0.0	0.0	2.6	5.4	6.2	11.6
1975	0.0	0.0	0.5	0.3	0.2	0.5	0.1	1.6	0.0	0.0	3.8	5.4	8.5	13.8
1980	0.0	1.7	2.3	0.0	0.3	0.3	0.2	3.0	0.0	0.0	5.0	9.7	11.1	20.8
1985	0.0	2.0	0.8	(s)	0.1	0.2	0.1	1.2	0.0	0.0	5.5	8.8	11.5	20.3
1990	0.0	2.4	3.0	(s)	0.1	0.3	5.3	8.6	0.0	f 0.0	7.7	f 18.7	15.7	f 34.3
1991	0.0	2.3	3.6	(s)	0.1	0.3	0.1	4.0	0.0	0.0	8.0	14.4	13.9	28.2
1992	0.0	2.3	2.5	(s)	0.3	0.2	6.7	9.7	0.0	0.0	8.2	20.3	12.6	32.8
1993	0.0	2.3	1.6	(s)	0.1	0.1	0.2	2.0	0.0	0.0	8.3	12.5	10.2	22.7
1994	0.0	2.3	1.5	(s)	0.1	0.1	2.8	4.3	0.0	0.0	8.9	15.5	9.9	25.4
1995	0.0	2.3	1.5	(s)	0.1	0.1	0.4	2.0	0.0	0.0	9.5	13.8	10.6	24.4
1996	0.0	2.3	0.9	(s)	0.1	0.1	0.1	1.1	0.0	0.0	9.6	13.0	10.9	23.8
1997	0.0	1.8	1.8	(s)	0.1	0.1	0.1	2.1	0.0	0.0	9.7	13.5	10.6	24.2
1998	0.0	1.8	1.1	(s)	0.4	0.1	11.4	12.9	0.0	0.0	9.7	24.4	10.9	35.4
1999	0.0	1.8	0.9	(s)	0.2	0.1	(s)	1.2	0.0	(s)	10.0	13.1	R 11.7	24.8
2000	0.0	1.9	0.8	(s)	0.3	0.1	0.1	1.2	0.0	(s)	10.6	13.7	12.1	25.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses.

^e Small amounts of solar thermal and photovoltaic energy consumed in the commercial sector cannot be separately identified and are included in residential consumption.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

—=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 10. Industrial Energy Consumption Estimates, Selected Years, 1960-2000, Hawaii

Year	Coal ^a	Natural Gas ^b	Petroleum									Hydro-electric Power ^a	Wood and Waste ^a	Other ^{a,e}	Electricity ^a	Electrical System Energy Losses ^f	Total	
			Asphalt and Road Oil ^a	Distillate Fuel ^a	Kero-sene ^a	LPG ^{a,c}	Lubri-cants ^a	Motor Gasoline	Residual Fuel ^a	Other ^{a,d}	Total							
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels									Million kWh						Million kWh
1960	0	0	29	554	68	43	18	83	1,038	533	2,367	0	—	—	465	—	1,403	—
1965	0	0	306	635	10	82	21	76	1,712	655	3,497	83	—	—	1,096	—	2,516	—
1970	0	0	377	701	66	386	4	49	1,671	619	3,874	86	—	—	1,720	—	4,044	—
1975	0	0	379	603	31	472	30	53	1,346	734	3,648	71	—	—	2,538	—	5,696	—
1980	0	0	285	1,369	9	1,041	20	49	1,491	872	5,135	67	—	—	3,028	—	6,749	—
1985	46	0	308	471	(s)	9	18	104	1,344	757	3,010	67	—	—	3,143	—	6,571	—
1990	R 29	0	381	812	(s)	15	20	133	9 1,765	2,215	5,342	957	—	—	3,734	—	7,605	—
1991	R 45	0	383	692	(s)	46	18	150	1,804	1,910	5,003	51	—	—	3,773	—	6,507	—
1992	R 303	0	431	602	(s)	130	18	152	1,372	2,304	5,009	51	—	—	3,811	—	5,800	—
1993	R 691	0	444	451	(s)	772	19	241	1,070	2,050	5,046	42	—	—	3,770	—	4,675	—
1994	R 704	0	407	349	(s)	1,499	20	245	1,202	2,256	5,978	R 121	—	—	3,791	—	4,238	—
1995	R 895	0	438	405	(s)	1,207	19	245	1,040	2,161	5,515	82	—	—	3,803	—	4,265	—
1996	R 930	0	401	324	(s)	1,191	19	259	973	2,577	5,745	R 86	—	—	3,884	—	4,388	—
1997	R 912	(s)	396	489	(s)	6	20	242	862	2,540	4,556	97	—	—	3,856	—	R 4,230	—
1998	R 843	(s)	322	539	(s)	181	21	266	324	2,085	3,738	108	—	—	3,787	—	4,285	—
1999	R 801	(s)	353	253	(s)	(s)	21	155	399	2,091	3,272	R 96	—	—	3,748	—	R 4,383	—
2000	816	1	604	313	(s)	49	21	160	532	1,950	3,629	88	—	—	3,834	—	4,381	—
Trillion Btu																		
1960	0.0	0.0	0.2	3.2	0.4	0.2	0.1	0.4	6.5	3.2	14.3	0.0	0.0	0.0	1.6	15.8	4.8	20.6
1965	0.0	0.0	2.0	3.7	0.1	0.3	0.1	0.4	10.8	3.9	21.3	0.9	0.2	0.0	3.7	26.1	8.6	34.7
1970	0.0	0.0	2.5	4.1	0.4	1.5	(s)	0.3	10.5	3.7	22.9	0.9	0.2	0.0	5.9	29.9	13.8	43.7
1975	0.0	0.0	2.5	3.5	0.2	1.8	0.2	0.3	8.5	4.4	21.3	0.7	0.3	0.0	8.7	31.0	19.4	50.4
1980	0.0	0.0	1.9	8.0	0.1	3.8	0.1	0.3	9.4	5.2	28.7	0.7	11.9	0.0	10.3	51.7	23.0	74.7
1985	1.1	0.0	2.0	2.7	(s)	(s)	0.1	0.5	8.4	4.7	18.6	0.7	14.0	0.0	10.7	45.1	22.4	67.5
1990	0.7	0.0	2.5	4.7	(s)	0.1	0.1	0.7	11.1	13.3	32.6	9 0.6	R 22.1	R 9 0.2	12.7	R 9 68.9	25.9	R 9 94.8
1991	R 1.1	0.0	2.5	4.0	(s)	0.2	0.1	0.8	11.3	11.6	30.6	0.5	R 21.7	0.4	12.9	R 67.1	22.2	R 89.3
1992	R 6.8	0.0	2.9	3.5	(s)	0.5	0.1	0.8	8.6	13.8	30.2	0.5	R 21.3	0.3	13.0	R 72.0	19.8	R 91.8
1993	R 15.6	0.0	2.9	2.6	(s)	2.8	0.1	1.3	6.7	12.4	28.9	0.4	R 20.9	R 3.4	12.9	R 82.1	16.0	R 98.0
1994	R 15.7	0.0	2.7	2.0	(s)	5.5	0.1	1.3	7.6	13.6	32.8	R 1.2	R 18.0	R 4.1	12.9	R 84.7	14.5	R 99.2
1995	R 19.9	0.0	2.9	2.4	(s)	4.4	0.1	1.3	6.5	13.1	30.6	0.8	R 17.2	5.1	13.0	R 86.7	14.6	R 101.2
1996	R 20.4	0.0	2.7	1.9	(s)	4.3	0.1	1.3	6.1	15.5	31.9	0.9	16.0	R 5.3	13.3	R 87.7	15.0	R 102.7
1997	R 20.0	0.4	2.6	2.9	(s)	(s)	0.1	1.3	5.4	15.3	27.6	1.0	R 15.4	R 5.3	13.2	R 82.8	14.4	R 97.3
1998	R 18.7	0.4	2.1	3.1	(s)	0.7	0.1	1.4	2.0	12.6	22.1	1.1	R 14.3	5.2	12.9	R 74.7	14.6	R 89.3
1999	R 17.7	0.5	2.3	1.5	(s)	(s)	0.1	0.8	2.5	12.6	19.9	1.0	R 14.7	4.6	12.8	R 71.1	15.0	R 86.1
2000	17.7	0.6	4.0	1.8	(s)	0.2	0.1	0.8	3.3	11.8	22.1	0.9	13.8	5.7	13.1	73.8	14.9	88.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels.

^c Liquefied petroleum gases.

^d "Other" is the subtotal of 16 petroleum products. See a full description in Section 4 of the Technical Notes "Other Petroleum Products."

^e "Other" is geothermal, wind, photovoltaic, and solar thermal energy. See Section 5 of the Technical Notes for an explanation of estimation methodology.

^f Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for

electrical system energy losses.

^g There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

R=Revised data.

kWh=Kilowatthours. —=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 11. Transportation Energy Consumption Estimates, Selected Years, 1960-2000, Hawaii

Year	Coal ^a	Natural Gas ^b	Petroleum								Ethanol ^d	Electricity ^a	Electrical System Energy Losses ^e	Total ^d	
			Aviation Gasoline ^a	Distillate Fuel ^a	Jet Fuel ^a	LPG ^{a,c}	Lubricants ^a	Motor Gasoline	Residual Fuel ^a	Total					
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels								Thousand Barrels	Million Kilowatthours	Net Energy	Million Kilowatthours	
1960	0	0	2,640	247	4,321	2	19	3,290	968	11,487	0	0	—	0	—
1965	0	0	613	844	7,618	4	73	3,947	1,195	14,294	0	0	—	0	—
1970	0	0	133	722	14,273	26	68	5,508	1,744	22,473	0	0	—	0	—
1975	0	0	116	831	14,849	22	74	6,615	1,013	23,520	0	0	—	0	—
1980	0	0	199	3,331	14,116	26	74	7,129	1,441	26,317	0	0	—	0	—
1985	0	0	155	3,253	13,260	6	68	7,443	1,526	25,710	f 0	0	—	0	—
1990	0	0	272	3,870	12,646	13	76	8,477	2,694	28,049	0	0	—	0	—
1991	0	0	261	4,224	11,123	14	68	8,771	2,609	27,072	0	0	—	0	—
1992	0	0	243	2,597	9,993	35	69	8,674	3,799	25,410	0	0	—	0	—
1993	0	0	198	2,017	8,891	9	71	8,808	2,689	22,682	0	0	—	0	—
1994	0	0	210	2,362	9,472	14	74	9,088	2,980	24,201	0	0	—	0	—
1995	0	0	218	2,171	9,940	8	73	9,160	2,719	24,289	0	0	—	0	—
1996	0	0	165	1,641	10,087	2	71	9,104	714	21,784	0	0	—	0	—
1997	0	0	121	1,203	10,217	2	75	9,104	500	21,221	0	0	—	0	—
1998	0	0	107	1,228	9,990	1	78	9,065	408	20,876	0	0	—	0	—
1999	0	0	58	1,568	9,474	0	79	8,786	2,051	22,016	0	0	—	0	—
2000	0	0	45	1,369	9,438	0	78	9,118	2,706	22,753	0	0	—	0	—
Trillion Btu															
1960	0.0	0.0	13.3	1.4	23.5	(s)	0.1	17.3	6.1	61.8	0.0	0.0	61.8	0.0	61.8
1965	0.0	0.0	3.1	4.9	42.3	(s)	0.4	20.7	7.5	79.0	0.0	0.0	79.0	0.0	79.0
1970	0.0	0.0	0.7	4.2	80.1	0.1	0.4	28.9	11.0	125.3	0.0	0.0	125.3	0.0	125.3
1975	0.0	0.0	0.6	4.8	83.5	0.1	0.5	34.7	6.4	130.5	0.0	0.0	130.5	0.0	130.5
1980	0.0	0.0	1.0	19.4	79.2	0.1	0.5	37.4	9.1	146.7	0.0	0.0	146.7	0.0	146.7
1985	0.0	0.0	0.8	18.9	74.4	(s)	0.4	39.1	9.6	143.3	f 0	0.0	f 143.3	0.0	f 143.3
1990	0.0	0.0	1.4	22.5	71.1	(s)	0.5	44.5	16.9	156.9	0.0	0.0	156.9	0.0	156.9
1991	0.0	0.0	1.3	24.6	62.6	(s)	0.4	46.1	16.4	151.4	0.0	0.0	151.4	0.0	151.4
1992	0.0	0.0	1.2	15.1	56.5	0.1	0.4	45.6	23.9	142.9	0.0	0.0	142.9	0.0	142.9
1993	0.0	0.0	1.0	11.7	50.4	(s)	0.4	46.3	16.9	126.8	0.0	0.0	126.8	0.0	126.8
1994	0.0	0.0	1.1	13.8	53.7	0.1	0.4	47.5	18.7	135.3	0.0	0.0	135.3	0.0	135.3
1995	0.0	0.0	1.1	12.6	56.4	(s)	0.4	47.8	17.1	135.4	0.0	0.0	135.4	0.0	135.4
1996	0.0	0.0	0.8	9.6	57.2	(s)	0.4	47.5	4.5	120.0	0.0	0.0	120.0	0.0	120.0
1997	0.0	0.0	0.6	7.0	57.9	(s)	0.5	47.5	3.1	116.6	0.0	0.0	116.6	0.0	116.6
1998	0.0	0.0	0.5	7.2	56.6	(s)	0.5	47.2	2.6	114.6	0.0	0.0	114.6	0.0	114.6
1999	0.0	0.0	0.3	9.1	53.7	0.0	0.5	45.8	12.9	122.3	0.0	0.0	122.3	0.0	122.3
2000	0.0	0.0	0.2	8.0	53.5	0.0	0.5	47.5	17.0	126.7	0.0	0.0	126.7	0.0	126.7

^a The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

^b Includes supplemental gaseous fuels. Transportation use of natural gas is gas consumed in the operation of pipelines, primarily in compressors, and, since 1990, is also gas consumed as vehicle fuel.

^c Liquefied petroleum gases.

^d Ethanol blended into motor gasoline, which is accounted for under motor gasoline, is shown separately here to display the use of renewable energy by the transportation sector and is included only once in the total.

^e Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for

electrical system energy losses.

^f There is a discontinuity in this time series between 1980 and 1981 due to the expanded coverage of renewable energy sources beginning in 1981.

—=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.

Table 12. Estimates of Energy Input at Electric Utilities, Selected Years, 1960-2000, Hawaii

Year	Coal	Natural Gas ^a	Petroleum				Nuclear Electric Power	Hydroelectric Power ^e	Wood and Waste	Geothermal Energy	Other ^{b,f}	Total ^g
			Residual Fuel ^{b,c}	Distillate Fuel ^{b,d}	Petroleum Coke ^b	Total						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels				Million Kilowatthours					
1960	0	0	2,719	37	0	2,756	0	27	0	0	0	—
1965	0	0	4,292	61	0	4,353	0	22	0	0	0	—
1970	0	0	6,702	96	0	6,798	0	22	24	0	0	—
1975	0	0	8,880	429	0	9,309	0	18	25	0	0	—
1980	0	0	10,239	888	0	11,127	0	20	0	0	0	—
1985	0	0	10,295	752	0	11,047	0	19	25	19	0	—
1990	0	0	12,138	1,632	0	13,769	0	23	6	0	0	—
1991	0	0	10,986	1,710	0	12,696	0	20	0	0	0	—
1992	0	0	10,037	1,952	0	11,989	0	10	0	0	0	—
1993	0	0	8,568	2,088	0	10,656	0	14	0	0	0	—
1994	0	0	8,310	2,100	0	10,409	0	19	0	0	0	—
1995	0	0	8,525	2,187	0	10,713	0	16	0	0	0	—
1996	0	0	8,679	2,301	0	10,980	0	18	0	0	0	—
1997	0	0	8,507	2,286	0	10,793	0	19	0	0	0	—
1998	0	0	8,482	2,382	0	10,864	0	14	0	0	(s)	—
1999	0	0	8,663	2,532	0	11,195	0	19	0	0	4	—
2000	0	0	8,727	2,712	0	11,439	0	15	0	0	3	—
Trillion Btu												
1960	0.0	0.0	17.1	0.2	0.0	17.3	0.0	0.3	0.0	0.0	0.0	17.6
1965	0.0	0.0	27.0	0.4	0.0	27.3	0.0	0.2	0.0	0.0	0.0	27.6
1970	0.0	0.0	42.1	0.6	0.0	42.7	0.0	0.2	0.3	0.0	0.0	43.2
1975	0.0	0.0	55.8	2.5	0.0	58.3	0.0	0.2	0.3	0.0	0.0	58.8
1980	0.0	0.0	64.4	5.2	0.0	69.5	0.0	0.2	0.0	0.0	0.0	69.7
1985	0.0	0.0	64.7	4.4	0.0	69.1	0.0	0.2	0.3	0.4	0.0	70.0
1990	0.0	0.0	76.3	9.5	0.0	85.8	0.0	0.2	0.1	0.0	0.0	86.1
1991	0.0	0.0	69.1	10.0	0.0	79.0	0.0	0.2	0.0	0.0	0.0	79.2
1992	0.0	0.0	63.1	11.4	0.0	74.5	0.0	0.1	0.0	0.0	0.0	74.6
1993	0.0	0.0	53.9	12.2	0.0	66.0	0.0	0.1	0.0	0.0	0.0	66.2
1994	0.0	0.0	52.2	12.2	0.0	64.5	0.0	0.2	0.0	0.0	0.0	64.7
1995	0.0	0.0	53.6	12.7	0.0	66.3	0.0	0.2	0.0	0.0	0.0	66.5
1996	0.0	0.0	54.6	13.4	0.0	68.0	0.0	0.2	0.0	0.0	0.0	68.2
1997	0.0	0.0	53.5	13.3	0.0	66.8	0.0	0.2	0.0	0.0	0.0	67.0
1998	0.0	0.0	53.3	13.9	0.0	67.2	0.0	0.1	0.0	0.0	(s)	67.3
1999	0.0	0.0	54.5	14.8	0.0	69.2	0.0	0.2	0.0	0.0	(s)	69.4
2000	0.0	0.0	54.9	15.8	0.0	70.7	0.0	0.2	0.0	0.0	(s)	70.8

^a Includes supplemental gaseous fuels.^b The continuity of these data series estimates may be affected by changing data sources and estimation methodologies. See the Technical Notes for each type of energy.^c Prior to 1980, based on oil used in steam plants. Since 1980, residual fuel includes fuel oil nos. 4, 5, and 6 and residual fuel oils.^d Prior to 1980, based on oil used in internal combustion and gas turbine engine plants. Since 1980, distillate fuel includes fuel oil nos. 1 and 2, kerosene, and jet fuel.^e If applicable, through 1988, includes all net imports of electricity, and, from 1989, includes only the portion of

imports of electricity that is derived from hydroelectric power.

^f "Other" is electricity generated for distribution from wind, photovoltaic, and solar thermal energy.^g If applicable, from 1989, includes net imports of electricity generated from nonrenewable energy sources not shown in other columns. See data in Table TN8 in the Technical Notes.

—=Not applicable.

(s)=Btu value less than 0.05 and physical unit value less than 0.5.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.